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Sambucus nigra (L.) liophylised extract as source of direct compression tablets obtaining

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Abstract The aim of this paper is the valorization of a 10 % anthocyanins elderberries lyophilized extract standardized as cyanidin-3-glucoside in lozenges obtained by direct compression and quality lozenges evaluation according to Romanian and European pharmacopoeia tests. The resulting lozenges with a 600 mg concentration of a 10 % anthocyanins elderberries lyophilized extract standardized as cyanidin-3-glucoside were evaluated using the following tests: appearance and mass uniformity (20 lozenges) disintegration time (6 lozenges), hardness (10 lozenges), anthocyanins assay expressed as cyanidin-3-glucoside using a spectrometric method at pH differential values. The results are expressed as means± standard deviation. The tablets for the two formulas have the same appearance (flat, round, colored in purple – red, non gritty), the dimensional characteristics (height, thickness) are different, average mass complies the pharmacopoeia standards. The lozenges from formula 2 have a higher resistance (215.7 N) and a lower disintegration time (11 min.) according to the official recommended values, due to differences from carbopol polymers differences in properties at the same concentration used in the two formulas. Using the direct compressible products described in this study, the direct compression technique can be easily applied for the manufacture of lozenges, thus ensuring their stability by avoiding heat and humidity factors during the manufacturing process. The resulting lozenges from formula 1 respect the quality specifications provided by the Romanian Pharmacopoeia Xth edition, the European Pharmacopoeia. The lozenges presented a high mechanical resistance (110 N) and a good disintegration time (15 min.)

Keywords: elderberries lyophilized extract, lozenges, direct compression, official quality tests.

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